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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/975,332	10/10/2001	Naoyuki Goto	645-150	2695

7590

06/04/2003

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EXAMINER

BLACKWELL RUDASIL, GWENDOLYN A

ART UNIT	PAPER NUMBER
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1775

DATE MAILED: 06/04/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/975,332

Applicant(s)

GOTO, NAOYUKI

Examiner

Gwendolyn A. Blackwell-Rudasill

Art Unit

1775

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 March 2003.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5, 7-11 and 17-37 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 17-27 is/are allowed.
- 6) ☒ Claim(s) 1-5 and 28-37 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

*A person shall be entitled to a patent unless –*

*(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.*

2. Claims 1-4, 7-10, 28-31, and 33-36 are rejected under 35 U.S.C. 102(b) as being anticipated by United States Patent no. 4,390,638, Mennemann et al.

Mennemann et al., discloses an optical glass having the composition in weight percent of: 18-36% SiO<sub>2</sub>, 3-18% B<sub>2</sub>O<sub>3</sub>, 0-14% P<sub>2</sub>O<sub>5</sub>, 0-12% Li<sub>2</sub>O, 0-14% Na<sub>2</sub>O, 0-18% K<sub>2</sub>O, 0-15% MgO, 7-25% CaO, 0-13% SrO, 0-17% BaO, 0-15% ZnO, 3-14% TiO<sub>2</sub>, 0-13% Nb<sub>2</sub>O<sub>5</sub>, 0-10% WO<sub>3</sub>, 0-15% ZrO<sub>2</sub>, 0-20% La<sub>2</sub>O<sub>3</sub>, 0-16% Y<sub>2</sub>O<sub>3</sub>, and 0-13% Ta<sub>2</sub>O<sub>5</sub>, with a coefficient of thermal expansion of  $90-98 \times 10^{-7}/^{\circ}\text{C}$  over the temperature range of 20-300°C, meeting the requirements of claims 1-4, 7-10, 28-31, and 33-36, (columns 1-2, lines 45-68).

A chemical composition and its properties are inseparable. *MPEP 2112.02*. Because the prior art exemplifies the applicant's claimed composition in relation to the glass composition, the claimed physical properties are inherently present in the prior art. As such, the addition of the claimed physical property to the claim language fails to provide patentable distinction over the prior art.

### *Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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*(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.*

4. Claims 5, 11, 32, and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over United States Patent no. 4,390,638, Mennemann et al. as applied to claims 1, 7, 28 and 33 above, and further in view of United States Patent no. 5, 719,989, Cushing.

Mennemann et al., disclose the limitations of claim 1 as set out above. Mennemann et al., do not disclose that the optical glass can be used in a light filter.

Cushing discloses a light filter utilizing a glass substrate, (columns 5-6, lines 65-2). The light filter is comprised of dielectric layers made of materials such as silicon dioxide, tantalum pentoxide, niobium oxide and aluminum oxide, which are stacked in the glass substrate. Cushing does not disclose the specific composition of the glass substrate.

The optical glass of Mennemann et al., can be used in optical systems, (column 1, lines 10-45). Because the glass of Mennemann et al., can be used in optical systems and the light filter of Cushing discloses an invention, which utilizes a glass for a substrate, it would have been obvious to one skilled in the art at the time of invention to use the glass of Mennemann et al., as the substrate for the light filter of Cushing obtaining a light filter having the desired coefficient of thermal expansion and light transmittance.

#### ***Response to Arguments***

5. Applicant's arguments, see pages 6-7, filed March 7, 2003, with respect to claims 17-23 have been fully considered and are persuasive. The rejection of claims 17-23 has been withdrawn.

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6. Applicant's arguments filed March 7, 2003 have been fully considered but they are not persuasive with respect to claims 1-5, 7-11, and 28-37. Applicant contends that the examples cited in Mennemann et al do not teach the invention as recited in the amended claims. Mennemann et al do not specifically, disclose the use of lithium oxide in a range from 2-8.5%. However, one of skill in the art would know that lithium oxide can be added to glasses to obtain different properties depending upon the use of the final product. Mennemann et al disclose a range that completely encompasses Applicant's claimed range. Absent an evidentiary showing to the contrary of unexpected results the inclusion of the narrower range does not provide patentable distinction over the prior art.

7. Applicant did not state with particularity reasons to overcome Cushing should be overcome as a prior art rejection aside from the traversal of the Mennemann et al reference. Because Applicant's arguments with respect to the Mennemann et al reference have been maintained, as well as the abovementioned reference being used to reject new claims 28 and 33, the 35 USC 103(a) rejection of claims 5 and 11 will be maintained. New claims 32 and 37 have been included in the 103(a) rejection.

***Allowable Subject Matter***

8. Claims 17-27 are allowed over the prior art of record. The following is a statement of reasons for the indication of allowable subject matter:

Claims 17-27 include the limitation that the glass should be substantially free of CaO. The glass of Mennemann et al requires CaO. Mennemann et al do not teach or suggest making a glass that is substantially free of CaO.

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***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gwendolyn A. Blackwell-Rudasill whose telephone number is (703) 305-9741. The examiner can normally be reached on Monday - Thursday; 6:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Deborah Jones can be reached on (703) 308-3822. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Gwendolyn A. Blackwell-Rudasill  
Examiner  
Art Unit 1775

*GBR*  
gbr  
June 2, 2003

*Deborah Jones*  
DEBORAH JONES  
SUPERVISORY PATENT EXAMINER